DOCUMENT RESUME

ED 280 859 TM 870 185

TITLE Identifying Minimum Skills, School Year 1984-85.
INSTITUTION Kansas State Dept. of Education, Topeka. Div. of Education Services.
PUB DATE [85]
NOTE 37p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Behavioral Objectives; Criterion Referenced Tests; Elementary Secondary Education; Grade 2; Grade 4; Grade 6; Grade 8; Grade 10; Instructional Improvement; *Mathematics Skills; *Minimum Competencies; *Minimum Competency Testing; *Reading Skills; School Districts; Scores; State Programs; State Standards; *Test Results
IDENTIFIERS *Kansas Minimum Competency Testing Program

ABSTRACT

The Kansas Minimum Competency Tests (KMCT) were designed to provide information about student performance on selected minimum competencies in reading and mathematics. The KMCT were criterion referenced tests in which each item was keyed to a minimum competency objective; student performance was measured against a predetermined standard. The tests for grades two, four, and six focused on minimum skills necessary to achieve success at the next grade level. In grades eight and ten, the focus was on the application of reading and mathematics skills in lifelike situations. This report analyzes the performance of Kansas students on the minimum competency examinations given in April 1985. Results are summarized for each grade level along with tables listing each objective, objective number (ranked by the percent of students meeting teacher expectation), teacher expectation level, percent of students meeting teacher expectations, and test item numbers corresponding to the objectives. Based on the results, general instructional recommendations are given for both reading and mathematics. Tables following the report indicate the percentage of students tested whose scores met or exceeded established minimal competence standards for every public and private school district participating in the April 1985 KMCT. (JAZ)

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Identifying Minimum Skills School Year 1984-85

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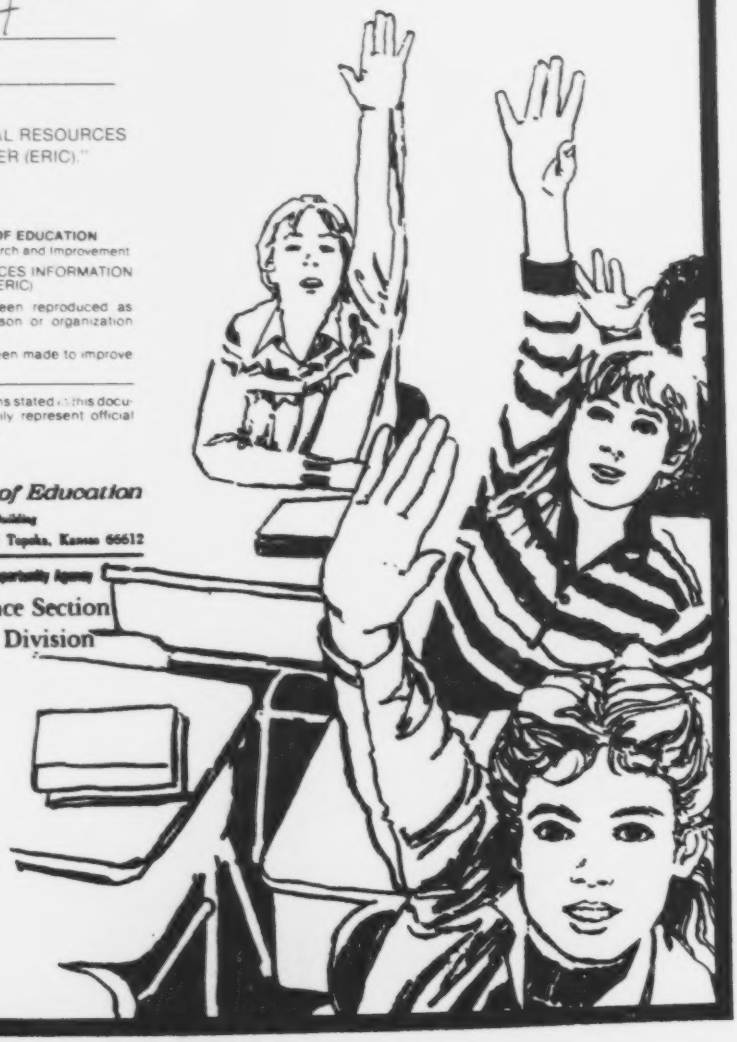

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INTRODUCTION

The Kansas minimum competency tests (KMCT) were designed to provide information about student performance on selected minimum competencies in the areas of reading and mathematics. Studies have shown test results are (a) valuable as indicators of statewide student achievement of selected minimum competencies in the areas of reading and mathematics, and that (b) it is possible to use school year test results between 1979-80 and 1984-85 in order to equate student and school district performance.

The criterion-referenced testing, in the form of the Kansas miniumum competency tests, has drawn the public's attention to the notion of measuring successful schools in terms of achievement. However, much has been written on the inapporpriateness of using only one test to make judgements about quality education in our schools. There is some question in the minds of some about how valuable such tests are for gaining perspectives on measuring the educational progress of school students. "Identifying Minimum Skills" is designed to provide test data in a meaningful fashion so that: (a) the public can ascertain how students in various districts are meeting minimum educational objectives at district levels; and (b) parents and teachers can gain a general idea of how well students are doing in specific skill areas of reading and mathematics.

The analysis of the Kansas Minimum Competency objectives was performed by Dr's. Deborah Cheves and Terry Parks, Shawnee Mission. Both have served as subject area committee members on the minimum competency advisory committee from the beginning of the program (1979).

Because of the working involvement and the curricular speciality backgrounds of Dr's. Cheves and Parks, their observations and recommendations provide invaluable information for effective use of the Kansas Minimum Competency Testing program results.

Purpose

K.S.A. 1978 supp. 72-9401 et seq. provided the legislature with student test data which were used to determine if competency based education programs were desirable for the State of Kansas. The legislature's review of the data culminated in a bill amendment during the 1981 legislative session establishing a two-year minimum competency assessment program applicable to students enrolled in public and accredited nonpublic schools. The only students exempted from taking the test were those enrolled in special education programs which provide entirely nonacademic and nonvocational activities and anyone who could not read, understand or speak the English language.

The program's purpose is to ensure all Kansas students similar opportunities for learning, emphasizing experiences that give students at least minimum competencies in skills necessary to function in today's society. The program is designed to provide the public, the State Board of Education, and the legislature with descriptive profiles of student performance relative to minimum competencies in reading and mathematics. The results are also to be used to assist the educational progress of each student through early identification of educational needs.

The Kansas minimum competency tests are criterion-referenced tests, specifically designed to measure whether a student had reached a set level of competency. Each item was keyed to a minimum competency objective; therefore, student performance was measured against a predetermined standard. (In standardized norm-referenced achievement tests, the student's performance level is compared to the performance levels of others students. Norm-referenced tests usually discriminate between students of varying ranges of achievement, whereas criterion-referenced tests do not.)

The criterion-referenced tests for grades two, four, and six focused on those minimum academic reading and mathematics skills considered to be necessary before a student could reasonably be expected to achieve success at the next grade level. In grades eight and ten the focus of the tests was on the application of reading and mathematics skills in lifelike situations.

Total score standards of minimal performance were set by the State Board of Education for each reading and mathematics criterion-referenced test. These minimum standards are the number of items to be answered correctly on each test in order for a student to be considered minimally competent on the test.

KANSAS MINIMUM COMPETENCY TEST

ANALYSIS OF STUDENT PERFORMANCE

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1985 READING PERFORMANCES

The results contained in this report reflect Kansas students' performance on the fifth minimum competency examination given in the state. This report is written to describe the reading component of the April, 1985, examination in a manner which, hopefully, teachers and other school officials will find useful.

Overall Summary

Objectives on the tests for all five grade levels represent four major categories often used to define reading. These categories are:

Vocabulary: knowledge of word meanings
Work Analysis: knowledge and use of phonics generalizations
Comprehension: gaining meaning from print
Study Skills: using reading tools to aid in finding and using information

Before analyzing student performance by grade level, the writers (or we) placed all 95 objectives measured at grades 2, 4, 6, 8 and 10 into these four categories.

The discussion which follows provides a summary of the students' performance at all five grade levels in vocabulary, word analysis, conprehension, and study skills.

At grades 2, 4 and 6, student performance on word analysis and structural analysis objectives was very good. Twelve word analysis objectives were included at each of the three levels. Only two were troublesome to students - troublesome defined as attained by less than 80% of the students. These were initial consonant blends and final consonant sounds at second grade.

At the three elementary levels plus 8th grade, vocabulary was measured with items representing nine objectives. All nine objectives were attained by at least ninety percent of the students. Performance on objectives related to vocabulary appears to be excellent.

At all grade levels, study skills were measured either in an academic or life skill context. In fact, study skill objectives numbered 24 across the five grade levels. Fourteen of twenty-four objectives were attained by 90% of the students. Four additional objectives were attained by at least 80% of the students. Six objectives in this category presented difficulty for students at particular grade levels. These were:

1. use of guide words (4th, 6th)
2. identify information from table of contents (4th)
3. identify key word to locate a topic in an encyclopedia (4th, 6th)
4. identify information from an index (4th)

At grades 2, 4 and 6, student performance on word analysis and structural analysis objectives was very good. Twelve word analysis objectives were included at each of the three levels. Only two were troublesome to students - troublesome defined as attained by less than 80% of the students. These were initial consonant blends and final consonant sounds at second grade.

Twelve of the 50 comprehension objectives across the five grade levels were attained by less than 80% of the students. They were:

1. identify main idea (4th, 6th)
2. identify an appropriate summary (4th and 6th)
3. identify a logical conclusion (4th)
4. identify sequence (6th)
5. identify support for a conclusion (10th)
6. identify information from an itemized billing statement (10th)
7. follow directions (10th)
8. identify conditions imposed by a document promising product or service (10th)

Analyses of student performance by grade level are presented in the following tables.

GRADE 2 RESULTS

Table 1 displays the grade 2 reading objectives, teacher expectation level, percent of students who met teacher expectations', and item numbers on the test which correspond to the objective. Objectives are ranked by the percent of students meeting teacher expectation in 1985.

TABLE I. 1983 and 1985 RESULTS FOR READING-GRADE 2

STRAND	OBJECTIVE	OBJ NO	1985 TCHR EXP	1985 %MTG EXP	1985 %MTG EXP	1985 ITEM NOS
WORD ANALYSIS	INITIAL CONSONANT DIGRAPH	5	2	96.8	99.3	16, 17, 18
VOCABULARY	CLASSIFICATION OF WORDS	7	2	93.9	99.1	13, 14, 15
COMPREHENSION	USE OF CONTEXT CLUES	10	2	97.0	97.6	28, 29, 30
WORD ANALYSIS	IDENTIFY A COMPOUND WORD	8	2	85.5	96.4	22, 23, 24
STUDY SKILLS	ALPHABETICAL ORDER	9	2	94.1	95.9	10, 11, 12
COMPREHENSION	FACT VS. FANTASY	11	2	91.1	94.9	31, 32, 33
COMPREHENSION	IDENTIFY DETAILS	13	2	80.4	93.3	37, 38, 39
VOCABULARY	SYNONYMS	6	2	88.0	93.1	19, 20, 21
COMPREHENSION	SEQUENCE OF EVENTS	14	2	95.6	92.8	40, 41, 42
COMPREHENSION	IDENTIFY A CONCLUSION	12	2	85.7	92.0	34, 35, 36
WORD ANALYSIS	LONG VOWEL SOUND	3	2	75.1	82.9	7, 8, 9
WORD ANALYSIS	SHORT VOWEL SOUND	4	2	77.9	81.2	25, 26, 27
COMPREHENSION	IDENTIFY MAIN IDEA	15	2	76.8	80.3	43, 44, 45
WORD ANALYSIS	INITIAL CONSONANT BLEND	2	3	81.2	79.1	4, 5, 6
WORD ANALYSIS	FINAL CONSONANT SOUND	1	3	75.9	71.5	1, 2, 3

In summary, seventy-one percent of the students were able to meet teacher expectations on all fifteen reading objectives.

90% or more of the students met teacher expectations on objectives.
80% or more of the students met expectations on an additional 3 objectives.
71% or more of the students met teacher expectations on all objectives.

Most second grade students were able to answer vocabulary items; to use context clues, sequence, and details to gain meaning; to distinguish between fact and fantasy; to identify conclusions; and to demonstrate skill with consonant diagraphs. Most could also identify a compound word and could identify the word which would be placed first if a list of words were alphabetized.

Skills which appeared more difficult (fewer than 80% of the students met expectations) were related to:

1. final consonant sounds
2. initial consonant blend

Improved performance over 1983 results was noted on eleven objectives. Improvement, defined by an increase in the percentage of students who met expectations, occurred not only with objectives with which most students in the past had been successful but also with long vowel sounds, short vowel sounds, and the main idea of passages. Over time, more second graders have been able to identify the main idea of a passage as can be seen in the following statistics:

1982 Main Idea 69.9% of students met expectations
1983 Main Idea 76.8% of students met expectations
1985 Main Idea 80.3% of students met expectations

A total of 32 correct items out of 45 was required to meet the expectation set forth by teachers. Ninety-two and four tenths percent of the students attained a score of 35 or better.

GRADE 4 RESULTS

Table II presents a summary of fourth grade students' performance on twenty objectives. Objectives are ranked by the percentage of students meeting teacher expectations in 1985.

TABLE II. 1983 and 1985 RESULTS FOR READING-GRADE 4

STRAND	OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 %MTG EXP	1985 %MTG EXP	1985 ITEM NOS
STRUCTURAL ANAL.	CONTRACTIONS	7	2	95.5	98.3	13, 14, 15
STUDY SKILLS	ALPHABETICAL ORDER	9	2	98.6	98.0	19, 20, 21
VOCABULARY	ANTONYMS	5	2	92.8	97.6	7, 8, 9
STRUCTURAL ANAL.	SYLLABICATION	2	2	92.5	97.3	4, 5, 6
WORD ANALYSIS	SOUND/SILENT VOWELS	1	2	95.8	96.6	1, 2, 3
COMPREHENSION	IDENTIFY DETAILS	16	2	59.1	94.8	28, 33, 38
VOCABULARY	ABBREVIATIONS	6	2	97.0	94.3	10, 11, 12
COMPREHENSION	USE OF CONTEXT TO DETERMINE WORD MEANINGS	4	2	89.7	93.6	25, 26, 27
STRUCTURAL ANAL.	IDENTIFY SINGULAR AND PLURAL NOUNS	8	2	76.6	92.3	46, 47, 48
VOCABULARY	MEANING OF A PREFIXED WORD	3	2	92.4	90.8	22, 23, 24
STUDY SKILLS	USE DICTIONARY TO DETERMINE WORD MEANING	11	2	81.6	90.7	52, 53, 54
COMPREHENSION	IDENTIFY SEQUENCE OF EVENTS	19	2	84.0	86.3	31, 36, 41
COMPREHENSION	IDENTIFY AS FACT OR OPINION	15	2	79.3	80.5	16, 17, 18
STUDY SKILLS	IDENTIFY APPROPRIATE ENCYCLOPEDIA VOLUME	12	2	82.9	79.2	49, 50, 51
COMPREHENSION	IDENTIFY LOGICAL CONCLUSION	20	2	76.0	76.7	32, 37, 42
COMPREHENSION	IDENTIFY MAIN IDEA	18	2	75.2	75.2	30, 35, 40
STUDY SKILLS	IDENTIFY INFORMATION FROM INDEX	14	2	82.8	65.5	58, 59, 60
STUDY SKILLS	IDENTIFY INFORMATION FROM TABLE OF CONTENTS	13	2	59.3	61.0	55, 56, 57
STUDY SKILLS	USE OF GUIDE WORDS	10	2	65.3	56.1	43, 44, 45
COMPREHENSION	IDENTIFY AN APPROPRIATE SUMMARY	17	2	49.3	52.4	29, 34, 39

Fourth-grade students exhibited areas of both strength and weakness.

90% or more of the students met teacher expectations on 11 objectives.
80% or more of the students met teacher expectations on 13 objectives.
70% or more of the students met teacher expectations on 16 objectives.
60% or more of the students met teacher expectations on 2 additional objectives.
50% or more of the students met teacher expectations on the final 2 objectives.

The percentage of fourth-grade students who met expectations increased for fourteen of the twenty objectives between 1983 and 1985. The increase ranged from +0.7% to +35.7%. Table II reveals that significantly more students in 1985 were able to answer questions about details in a passage, identify singular or plural nouns as appropriate, and to use a dictionary to determine word meanings than were able to in 1983.

Fewer than 80% of the students met teacher expectations, on both study skills and comprehension objectives. Those objectives included:

1. Identify appropriate encyclopedia volume
2. Identify information from an index
3. Identify information from a table of contents
4. Use of guide words in glossary
5. Identify logical conclusions
6. Identify main idea
7. Identify an appropriate summary

Since 1982, these seven objectives have consistently presented difficulties for 15% to 50% of the population of fourth grade students as shown below:

	Percent Meeting Standards		
Objective	1982	1983	1985
Identify encyclopedia volume	85%	83%	79%
Identify conclusion	75%	76%	77%
Identify main idea	79%	75%	75%
Identify infomation from index	68%	82%	65%
Identify information from table of contents	69%	59%	61%
Use of guide words	63%	65%	56%
Identify an appropriate summary	50%	50%	52%

All of these objectives are addressed in standard reading series. However, for many students, the standard presentation appears to be insufficient. Recommendations which may be helpful in addressing the objectives above are included on page 5.

Eighty-six and eight tenths percent of the fourth-grade students attained a total score of at least 39, which was deemed an acceptable score by teachers.

GRADE 6 RESULTS

Table III indicates how well sixth-grade students performed on twenty reading objectives. The results are, again, ordered in terms of student performance as compared to teacher expectations.

TABLE III. 1983 and 1985 RESULTS FOR READING-GRADE 6

STRAND	OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 %MTG EXP	1985 %MTG EXP	1985 ITEM NOS
STUDY SKILLS	ALPHABETICAL ORDER	9	2	98.8	95.5	13, 14, 15
STUDY SKILLS	USE OF DICTIONARY TO DETERMINE WORD MEANINGS	11	2	89.3	95.2	52, 53, 54
VOCABULARY	IDENTIFY THE MEANING OF A PREFIXED WORD	2	2	84.8	95.1	10, 11, 12
STRUCTURAL ANAL.	CONTRACTIONS	6	2	96.3	94.7	4, 5, 6
COMPREHENSION	COMPLETE AN ANALOGY	5	2	93.1	94.4	46, 47, 48
COMPREHENSION	USE OF CONTEXT TO DETERMINE WORD MEANINGS	7	2	80.5	94.1	49, 50, 51
VOCABULARY	IDENTIFY THE MEANING OF A SUFFIXED WORD	1	2	87.7	93.6	7, 8, 9
COMPREHENSION	IDENTIFY MEANING OF PRONOUNS	15	2	83.9	92.3	58, 59, 60
VOCABULARY	IDENTIFY ANTONYMS	8	2	82.8	91.4	16, 17, 18
COMPREHENSION	IDENTIFY DETAILS	18	2	64.5	91.2	25, 31, 37
COMPREHENSION	IDENTIFY EXTRANEOUS INFORMATION	4	2	90.6	85.8	22, 28, 34
STUDY SKILLS	IDENTIFY INFORMATION FROM INDEX	14	2	84.3	85.0	19, 20, 21
STUDY SKILLS	INDENTIFY INFORMATION FROM TABLE OF CONTENTS	13	2	90.5	84.3	55, 56, 57
STRUCTURAL ANAL.	IDENTIFY PLURAL FORM OF A NOUN	3	2	83.7	83.9	1, 2, 3
COMPREHENSION	IDENTIFY LOGICAL CONCLUSION	20	2	75.2	82.5	27, 33, 39
COMPREHENSION	IDENTIFY IMPLIED MAIN IDEA	16	2	47.2	79.4	23, 24, 25
STUDY SKILLS	IDENTIFY KEY WORD TO LOCATE TOPIC IN AN ENCYCLOPEDIA	12	2	75.1	77.9	43, 44, 45
COMPREHENSION	IDENTIFY SEQUENCE OF EVENTS	17	2	72.1	77.8	24, 30, 36
STUDY SKILLS	USE OF DICTIONARY GUIDE WORDS	10	2	74.5	75.2	40, 41, 42
COMPREHENSION	IDENTIFY SUMMARY	19	2	55.0	74.4	26, 32, 38

Sixth-grade students were generally able to meet teacher expectations on the twenty objectives.

90% or more of the students met teacher expectations on 10 objectives.
80% or more of the students met teacher expectations on 15 objectives.
74% or more of the students met teacher expectations on 20 objectives.

Performance in 1985 on sixteen of the 20 objectives was higher than in 1983 as defined by an increase in the percentage of students who met teacher expectations. The remaining four objectives for which performance may be said to have declined were all objectives mastered by at least 84% of the population. They were among those objectives with the highest percentage of students meeting expectations. The declines were minimal, ranging from -1.6% to -6.2%.

Likewise, a comparison of the percentage of students meeting expectations in 1982 and 1985 followed the same pattern, with one exception. Data reveal that declines were experienced on objectives which ranked first, second, third, fourth, fifth, sixth, seventh, tenth, and eighteenth in student performance in 1982. The decline, once again, occurred with objectives on which the highest performance was recorded in 1982. The difference in the percentage of students meeting expectations on nine of the objectives in 1982 and in 1985 ranged from -0.1% (18th in rank) to -14.2% (ranked 7th in 1982).

If this pattern were to be replicated over many years, it would suggest the hypothesis that less attention was given to objectives with high performance in previous years. As instruction is planned for 1985-86, it is critical that sufficient attention is devoted to all objectives.

Objectives which were a source of difficulty for more than 20% of sixth grade students in 1985 were:

1. Identify implied main idea
2. Identify key word to locate a topic in the encyclopedia
3. Identify sequence of events
4. Use of dictionary guide words
5. Identify summary.

These objectives were troublesome to students in past years also, but the data suggest that some improvement has occurred.

Eighty-five and six tenths percent of the students met the total score expectation of 42.

GRADE 8 RESULTS

Table IV reviews the percentages of eighth-grade students who met teacher expectations in reading.

TABLE IV. 1983 and 1985 RESULTS FOR READING-GRADE 8

STRAND	OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 %MTG EXP	1985 %MTG EXP	1985 ITEM NOS
COMPREHENSION	IDENTIFY THE MEANING OF COMMON SIGNS	4	2	95.7	99.0	17, 20, 21
STUDY SKILLS	IDENTIFY AUTHOR, TITLE, OR CALL NUMBER OF BOOK FROM A LIBRARY CATALOG CARD	6	2	84.2	98.8	13, 14, 15
COMPREHENSION	IDENTIFY MEANING OF A COMMON WARNING	3	2	90.6	98.7	16, 18, 19
COMPREHENSION	IDENTIFY MEANING OF PRONOUNS	14	2	98.5	98.4	10, 11, 12
COMPREHENSION	IDENTIFY CAUSE AND EFFECT	5	2	97.3	97.7	40, 41, 42
COMPREHENSION	USE OF CONTEXT TO DETERMINE WORD MEANINGS	2	2	96.8	97.6	7, 8, 9
STUDY SKILLS	IDENTIFY INFORMATION FROM TELEPHONE BOOK	11	2	92.9	96.1	46, 47, 48
STUDY SKILLS	IDENTIFY INFORMATION FROM AN INDEX	10	2	86.4	95.8	43, 44, 45
STUDY SKILLS	SELECT INFORMATION TO COMPLETE AN APPLICATION FORM	13	2	95.9	95.5	52, 53, 54
COMPREHENSION	IDENTIFY AS FACT OR OPINION	18	2	90.2	95.4	1, 2, 3
STUDY SKILLS	USE OF DICTIONARY TO DETERMINE WORD MEANINGS	8	2	88.6	94.4	22, 23, 24
COMPREHENSION	IDENTIFY FACT IN ADVERTISING	12	2	82.8	93.6	28, 29, 30
VOCABULARY	IDENTIFY MEANING OF PREFIXED WORD	1	2	89.7	93.4	4, 5, 6
COMPREHENSION	FOLLOW DIRECTIONS	19	2	66.6	92.1	58, 59, 60
STUDY SKILLS	IDENTIFY INFORMATION FROM A MAP	7	2	76.6	91.9	49, 50, 51
COMPREHENSION	IDENTIFY INFORMATION FROM A PRINTED LIST	20	2	86.9	90.1	55, 56, 57
COMPREHENSION	IDENTIFY IMPLIED MAIN IDEA	15	2	79.2	87.6	31, 34, 37
STUDY SKILLS	IDENTIFY INFORMATION FROM TABLE OF CONTENTS	9	3	85.6	84.7	25, 26, 27
COMPREHENSION	IDENTIFY LOGICAL CONCLUSION	17	2	88.4	84.0	33, 36, 39
COMPREHENSION	IDENTIFY SEQUENCE OF EVENTS	16	2	86.0	81.1	32, 35, 38

Eighth-grade students performed well on nearly all of the twenty objectives.

90% or more of the students met teacher expectations on 16 objectives.
80% or more of the students met teacher expectations on all 20 objectives.

Ten to twenty percent of the students had difficulty with identifying implied main idea, identifying information from a table of contents, identifying a logical conclusion, and identifying sequence of events.

Ninety-three and three tenths percent of the students demonstrated a total score of 44 or greater - the total score which was acceptable to teachers for demonstrating minimal competency.

GRADE 10 RESULTS

In Table V is the list of reading objectives for tenth grade (1985) beginning with those attained by the highest percentage of students.

TABLE V. 1985 RESULTS FOR READING-GRADE 10

STRAND	OBJECTIVE	OBJ NO	1985 TCHR EXP	1985 %MTG EXP	1985 ITEM NOS
COMPREHENSION	IDENTIFY INFORMATION FROM EARNING STATEMENT	15	2	97.7	28, 29, 30
COMPREHENSION	IDENTIFY MEANING OF INSTRUCTIONS, WARNINGS, MEDICAL TERMS	2	2	97.6	4, 5, 6
COMPREHENSION	IDENTIFY INFORMATION FROM MEMO, ANNOUNCEMENT, OR AD	4	2	96.7	16, 17, 18
STUDY SKILLS	IDENTIFY SOURCES OF INFORMATION	6	2	96.5	13, 14, 15
COMPREHENSION	IDENTIFY AS FACT OR OPINION	11	2	95.7	10, 11, 12
COMPREHENSION	IDENTIFY INFORMATION FROM INCOME TAX FORMS	1	1	94.0	46, 47
COMPREHENSION	IDENTIFY INFORMATION FROM A CONTRACT	8	2	93.6	55, 56, 57
STUDY SKILLS	IDENTIFY INFORMATION TO COMPLETE JOB APPLICATION FORM	10	2	92.5	43, 44, 45
COMPREHENSION	IDENTIFY DETAILS OF AUTO AND MOTOR-CYCLE SAFETY FROM DRIVER'S HANDBOOK	19	2	92.4	22, 23, 24
COMPREHENSION	IDENTIFY IMPLIED MAIN IDEA	3	2	90.8	7, 8, 9
STUDY SKILLS	IDENTIFY INFORMATION FROM INDEX OR TABLE OF CONTENTS	9	2	90.4	25, 26, 27
COMPREHENSION	IDENTIFY AN AUTHOR'S INTENT	14	2	89.7	31, 32, 33
COMPREHENSION	IDENTIFY MEANING OF COMMON SIGNS	5	2	87.7	1, 2, 3
STUDY SKILLS	IDENTIFY INFORMATION FROM TELEPHONE BOOK	7	2	81.7	19, 20, 21
COMPREHENSION	IDENTIFY CORRECT PLACEMENT OF INFORMATION ON ORDER FORM	13	2	81.0	40, 41, 42
COMPREHENSION	SELECT PRODUCT BEST SUITED FOR PURPOSE	17	2	80.0	49, 50, 51
COMPREHENSION	IDENTIFY SUPPORT FOR CONCLUSION	16	2	79.1	34, 35, 36
COMPREHENSION	FOLLOW DIRECTIONS	12	2	77.0	58, 59, 60
COMPREHENSION	IDENTIFY CONDITIONS IMPOSED BY A DOCUMENT PROMISING PRODUCT OR SERVICE	18	2	76.7	37, 38, 39
COMPREHENSION	IDENTIFY INFORMATION FROM ITEMIZED BILLING STATEMENT	20	2	70.0	52, 53, 54

Tenth-grade students performed well on most objectives.

90% or more of the students met teacher expectations on 11 objectives.
80% or more of the students met teacher expectations on 16 objectives.
70% or more of the students met teacher expectations on 20 objectives.

Twenty to thirty percent of 1985 tenth-grade students had difficulty with four objectives:

1. identify support for a conclusion,
2. follow directions,
3. identify conditions imposed by a document promising product or service,
4. identify information from itemized billing statements.

Activities which offer students the opportunity to apply reading in practical situations should be beneficial.

Eighty-seven and four tenths percent of the students attained a score of 40 which was the required number of items correct for the minimum standard.

RECOMMENDATIONS

Data from tests administered in 1982, 1983, and 1985 suggest that more students each year are meeting the expected score. The following recommendations focus on the objectives which have been most difficult for students. In relation to some objectives, the instructional recommendations are reproductions of past suggestions which have been used effectively.

1. Increase the amount of time devoted to explaining and applying the concept of main idea. To help students understand the concept, present pictures and discuss with students the one idea each picture illustrates.

   Students can title pictures, draw pictures to illustrate main ideas presented in words, and match pictures with stated main ideas. Comic strips offer a transitional activity which enable students to derive main ideas from both pictures and written statements. Finally, as intermediate students apply the concept of main idea, assist them to see the relationship between main idea and topic sentence in each paragraph. Before asking students to identify main idea, work with students in pre-writing activities to write paragraphs about an assigned main idea. Students will enjoy developing *An Important Book* while they strengthen the concept of main idea and supporting details. This activity is an example of patterned writing and uses the following scheme:

   The most important thing about dogs *is that* they are good companions.
   They bark, run, and do tricks.
   Dogs play with you or sleep when you need rest.
   Dogs are always ready to go with you when you're on your bike.
   Some dogs work as watch dogs or seeing eye dogs.
   But the most important thing about dogs *is that* they are good companions.

Students can develop a collection of their "important" writing. After experiences such as these, students are better able to distinguish main idea from supporting details.

2. Recognizing or developing an appropriate summary continues to be difficult for students. Perhaps students would be helped by Webster's definition of summary - "covering the main points succinctly." Once the students have identified the main idea from a picture or reading selection, they need only to add a very few important details. One activity particularly for sixth grade students which is very motivating involves the development of television news teams from among the students in the class. But first, before the news teams become operational, students are taught what goes into a television news item and particularly the time the presentation of each item requires. Students are taught that the content includes who, what, when, where, why, and often how. From watching news on television, students can discover that each televised news item is only seconds long.

   Students then use newpaper articles as the source for their television news items. Very quickly they realize that the television item is a brief summary of the newspaper article. However, plenty of practice is needed to become proficient at developing the summary.

   Finally, students are ready to form news teams of four to five students. Students on each team decide which member is responsible for international news, national news, local news, sports, and weather. Students then develop the number of items specified by the teacher from newspaper articles, practice their news segment, and present it to the remaining class members. Video-taping enhances student enthusiasm to an even greater degree. Students should be allowed four to five weeks to develop skill through this activity. They definitely will learn to glean the important facts from articles and will be motivated to develop brief summaries.

3. Performance on some study skills objectives continues to be a source of concern.

   To motivate students to use the information presented about these skills, introduce the units with a clear statement of the purpose of each skill, which is to save time in finding information. Demonstrate to students how much more time is required to find a word on a page without the use of guide words, for instance. Once the concepts are established, provide many opportunities for students to practice these skills with dictionaries, encyclopedias, and content texts.

Activities such as "scavenger hunts" through which students are assigned a list of information to find utilizing the index, table of contents, dictionary, and encyclopedia will make practice more fun.

4. Comprehension, which underlies both learning from reading and enjoying what is read, is the central purpose of reading instruction. Plan for students to read several pieces (stories or content material) per week and discuss these pieces thoroughly. Use questions which address cause/effect, sequence, main idea, and details. Encourage students to learn to ask *important* comprehension questions.

KANSAS MINIMUM COMPETENCY TEST 1985-MATHEMATICS

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INTRODUCTION

The 1985, Kansas Minimum Competency Test was the first in a series of five such examinations established by 1984 legislation. Prior to the 1985 test, examinations were given on pilot bases in 1979 and 1980 followed by full scale testing in 1982 and 1983.

In the earlier testings students in grades 2, 4, 6, 8, and 11 were participants. The 1985 test was, as mandated, administered to students in grades 2, 4, 6, 8, and 10. The change from grade 11 to grade 10 was, presumably, placed in the law in an effort to afford schools greater opportunity for any needed remedial efforts with students.

In April, 1985, all Kansas students in the required levels took minimum competency tests in both reading and mathematics. This report is written to provide additional information educators can use to help analyze their school results. Similar reports were prepared for the 1982 (1) and 1983 (2) testings. All test results are from reports presented to the Kansas State Board of Education (3, 4, 5).

It should be noted that the objectives upon which the 1985 mathematics examinations were based were unchanged from those used in the 1983 tests.

GRADE 11 TO GRADE 10 CHANGE-MATHEMATICS

The committee charged with advising the Kansas State Department of Education regarding test objectives gave careful consideration to the implications of the change from grade 11 to grade 10 for the concepts and applications tested. It was determined that the objectives for minimum competency in mathematics as defined earlier for grade 11 were equally valid for grade 10. This decision was made because the committee agreed that the "life skill" requirements of the legislation can be appropriately interpreted as the application of mathematics skills presented to the vast majority of students in 8th grade. Review of textbooks and curricula of remedial mathematics courses taken by 9th and 10th graders supported this premise. As a consequence, 1983 grade 11 objectives were used without substantive change to develop the 1985 grade 10 mathematics examination.

SUMMARY

Generally mathematics performance as measured by the Kansas Minimum Competency Test has improved over the years the test has been administered (1980, 1982, 1983, and 1985) (6).

The 1985 test results indicate that Kansas students at all levels can compute. Further, students know basic geometric properties. At various grade levels improvements in application areas are apparent though they are not consistent across levels. It is thus necessary to review each level's results to determine specific trends. There continues to be a downward trend in mathematics performance across grade levels as the number of applications objectives increases.

SECOND GRADE RESULTS

Table I lists the results from the 1983 and 1985 second grade tests. Examination of these data indicate that 82.5% of Kansas students met expectations on all 15 second grade objectives, up from 78.8% in 1983. Major gains over 1983 were noted in subtraction word problems and addition (objectives 15 and 5). Positive growth was apparent in an additional ten objectives.

Performance on three objectives showed negative tendencies. These were reading graphs (objective 9), subtraction facts (objective 6), and identifying shapes (objective 10). The magnitude of decline on objective 10 is significant and should be a point of discussion among second grade teachers and administrators.

It is clear that second grade results improved over 1983 (and 1982) and should encourage parents, teachers and administrators that students at this level are learning what this test measures.

TABLE I. 1983 AND 1985 RESULTS FOR MATHEMATICS-GRADE 2

OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 % MTG EXP	1985 % MTG EXP	1985 ITEM NOS
ADDITION W/O REGROUPING	4	2	97.6	98.6	4, 5, 6
ADDITION WORD PROBLEMS	14	2	95.1	97.3	25, 26, 27
SUBTRACTION W/O REGROUPING	7	2	94.9	97.1	13, 14, 15
COUNTING	1	2	96.6	96.9	16, 17, 18
READ AND INTERPRET BAR GRAPHS	9	2	97.8	96.6	37, 38, 39
ADDITION FACTS	3	3	91.6	95.2	1, 2, 3
IDENTIFY VALUE OF COINS	12	2	94.9	95.2	40, 41, 42
IDENTIFY SHAPES	10	3	98.5	92.3	34, 35, 36
TELL TIME	8	2	91.0	91.8	31, 32, 33
IDENTIFY NUMBER REPRESENTED BY A GROUP OF OBJECTS	2	2	89.4	90.5	19, 20, 21
SUBTRACTION WORD PROBLEMS	15	2	79.2	88.9	28, 29, 30
ADDITION WITH REGROUPING	5	2	78.8	85.2	7, 8, 9
SUBTRACTION FACTS	6	3	86.3	84.9	10, 11, 12
MAKE CHANGE	13	2	81.5	84.8	43, 44, 45
IDENTIFY FRACTIONAL PARTS	11	2	82.1	82.5	22, 23, 24

In conclusion, Kansas second graders are generally meeting teacher expectations for minimum competency in mathematics. This is reinforced by observing that in 1985:

90% or more of the students at grade 2 met teacher expectations on 10 objectives (up from 9 in 1983 and 8 in 1982), and

80% or more of the students at grade 2 met teacher expectations on all 15 objectives.

In fact, 82.5% or more of the students met expectations in 1985. The corresponding figures for 1982 and 1983 were 69% and 78.8%, respectively.

FOURTH GRADE RESULTS

The 1985 performance at grade 4 demonstrated positive change in the percent of students meeting expectations on 14 of the 20 objectives tested. These gains ranged from +0.3 to +18.2.

Four objectives showed strong positive trends. These were: division fact word problems (+5.0, objective 20); multiplication word problems (+5.6, objective 19); ordering numbers (+9.6, objective 2); and interpreting line graphs (+18.2, objective 11). These observations should not, however, suggest complacency. Division fact word problems remain the objective with lowest performance. Also, multiplication word problem results place that objective 17th out of the 20 tested.

The growth in interpreting line graphs and ordering numbers is indicative of a trend which should be encouraged. Both are needed if Kansas is to more completely address the National Council of Teachers of Mathematics recommendations for the '80's (7).

The negative trends observed on six objectives ranged from -0.3 to -6.2. The most negative performance in comparison to 1983 occurred in multiplication facts (-6.2, objective 6). However, there are three mitigating considerations:

1. teacher expectations for performance on this objective increased from 2 items correct in 1983 to 3 items correct on the 1985 test,
2. multiplication objective #7 showed a +0.8 change, and
3. multiplication word problem performance, as noted above, increased markedly.

TABLE II. 1983 AND 1985 RESULTS FOR MATHEMATICS-GRADE 4

OBJECTIVE	OBJ NO	1983 TCHR EXP	1983 % MTG EXP	1985 % MTG EXP	1985 ITEM NOS
CONGRUENCY	12	2	96.6	97.0	55, 56, 57
DIVISION FACTS	8	2	94.5	95.5	13, 14, 15
ADDITION WITH REGROUPING	4	2	93.4	95.2	1, 2, 3
READ AND INTERPRET BAR GRAPHS	10	2	91.2	95.0	46, 47, 48
MULTIPLICATION	7	2	91.3	92.1	10, 11, 12
ORDER NUMBERS	2	2	82.2	91.8	16, 17, 18
MULTIPLICATION FACTS	6	3	97.6	91.4	7, 8, 9
TELL TIME	9	2	89.2	91.1	58, 59, 60
INTERPRET LINE GRAPHS	11	2	72.4	90.6	49, 50, 51
MEASUREMENT	17	2	89.6	90.4	52, 53, 54
IDENTIFY FRACTIONAL PARTS	13	2	85.9	90.3	19, 20, 21
IDENTIFY WORD NAME FOR A NUMBER	1	2	91.9	89.5	22, 23, 24
IDENTIFY PLACE VALUE	3	2	90.0	88.8	40, 41, 42
ADDITION WITH MONEY	14	2	85.6	88.5	25, 26, 27
SUBTRACTION WITH REGROUPING	5	2	87.7	85.5	4, 5, 6
SOLVE ADDITION SUBTRACTION WORD PROBLEMS	18	2	83.7	83.2	31, 32, 33
MULTIPLICATION WORD PROBLEMS	19	2	72.7	78.3	34, 35, 36
MAKE CHANGE	15	2	75.5	75.2	28, 29, 30
APPROXIMATION OF NUMBER	16	2	74.3	74.6	43, 44, 45
DIVISION FACT WORD PROBLEMS	20	2	60.4	65.4	37, 38, 39

In general, fourth grade students can compute, tell time, deal with simple statistical data, and perform numeration related activities. However, multiplication word problems, making change, approximation of numbers, and division fact word problems remain low performance objectives. These objectives need attention. Problem solving, estimation, and applying mathematics are essential for student mathematical development.

In summary, fourth graders met teacher expectations as below:

90% or more of 4th grade students met teacher expectations on 11 objectives (up from 8 in 1983 and 7 in 1982),

80% or more of 4th grade students met teacher expectations on 16 objectives (up from 15 in both 1983 and 1982),

70% or more of 4th grade students met teacher expectations on 19 objectives (the same as in 1983 but up from 18 in 1982), and

65% or more met expectations on all 20 objectives (up from 60% in both 1983 and 1982).

SIXTH GRADE RESULTS

Sixth grade results for 1983 and 1985 are shown in Table III. Positive changes are found between 1983 and 1985 performance on 17 objectives with negative trends on 3 objectives. Positive changes range from +0.1 to +21.8 (median +3.3) and negative changes range from -2.2 to -12.2 (median -4.3).

Strong positive growth was shown on: finding average (+6.1); subtraction word problems (+1.1); addition of decimals (+6.7); place value of decimals (+7.9); division word problems (+10.6); interpreting graphs (+12.2); calculating perimeter (+18.8); and subtracting decimals (+21.8). Reviewing these results in comparison to 1982 results (1) demonstrates a longitudinal positive growth across three tests in: interpreting non-linear graphic data (objective 6); adding decimals (objective 15); multiplication (objective 4); division word problems (objective 20); approximation (objective 13); multiplication word problems (objective 19); finding area (objective 9); and measurement (objective 14). It was also noted that, though there was strong positive growth in subtracting decimals from 1983 to 1985, the 1985 performance was essentially the same as in 1982.

TABLE III. 1983 AND 1985 RESULTS FOR MATHEMATICS-GRADE 6

OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 % MTG EXP	1985 % MTG EXP	1985 ITEM NOS
INTERPRET GRAPHIC DATA (EXCEPT LINE GRAPHS)	6	2	83.6	95.8	55, 56, 57
SUBTRACTION WITH REGROUPING	3	2	92.3	95.5	7, 8, 9
ADDITION OF DECIMALS	15	2	85.2	91.9	4, 5, 6
MULTIPLICATION	4	2	89.5	91.8	16, 17, 18
SUBTRACT DECIMALS	16	2	67.2	89.0	10, 11, 12
DIVISION	5	2	87.2	88.1	13, 14, 15
ADDITION WORD PROBLEMS	17	2	89.9	87.7	34, 35, 36
CALCULATE PERIMETER	10	2	68.3	87.1	49, 50, 51
ADDITION	2	3	85.5	87.0	1, 2, 3
DETERMINE UNIT COST	12	2	86.7	86.8	28, 29, 30
SUBTRACTION WORD PROBLEMS	18	2	82.4	83.5	37, 38, 39
DIVISION WORD PROBLEMS	20	2	72.7	83.3	43, 44, 45
APPROXIMATE NUMBERS	13	2	82.6	82.8	22, 23, 24
MULTIPLICATION WORD PROBLEMS	19	2	75.1	80.8	40, 41, 42
MULTIPLY FRACTIONS	11	2	85.1	80.8	19, 20, 21
DETERMINE AREA	9	2	70.1	73.9	46, 47, 48
MEASURE (NEAREST MM)	14	2	69.8	72.1	52, 53, 54
IDENTIFY PLACE VALUE OF DECIMALS	1	2	60.9	68.8	25, 26, 27
INTERPRET LINE GRAPHS	7	2	80.4	68.2	58, 59, 60
FIND AVERAGE	8	2	58.3	64.4	31, 32, 33

Negative trends from 1983 to 1985 occurred in: addition word problems (-2.2); multiplying fractions (-4.3); and interpreting line graphs (-12.2). Addition word problem performance has steadily declined since 1982. Multiplication of fractions and interpreting line graphs showed growth from 1982 to 1983 but in 1985 performance on both objectives was the lowest of the three years.

Overall, Kansas sixth graders can generally:

- compute (objectives 2, 3, 4, 5, 11, 15, and 16),
- solve word problems (objectives 17, 18, 19, and 20),
- interpret graphs that aren't line graphs (objective 6),
- determine unit cost (objective 12),
- approximate numbers (objective 13), and
- calculate perimeter (objective 10).

Approximately 10%-20% of 6th grade students continue to have difficulty with:

- determining area (objective 9),
- measuring (objective 14),
- identifying decimal place value (objective 1),
- interpreting line graphs (objective 7), and
- finding average (objective 8).

Downward trends in interpreting line graphs, addition word problems, and multiplying fractions should be checked in individual school data. If noted, corrective action should be taken. The continued presence of decimal place value, average, area, and measurement in the lowest quartile of performance indicates a need for emphasis in these topics.

Summarization of sixth grade performance from 1985 indicates that:

90% or more of the sixth grade students met expectations on 4 objectives (up from 1 in 1983 and 2 in 1982),
80% or more of the sixth grade students met expectations on 15 objectives (up from 12 in 1983 and 14 in 1982),
70% or more of the sixth grade students met expectations on 17 objectives (up from 15 in 1983 and the same as in 1982),
64% or more of the students met teacher expectations on all 20 objectives (up from 58% in both 1982 and 1983).

EIGHTH GRADE RESULTS

Table IV contains eighth grade results from the 1983 and 1985 tests. The data show positive gains on 14 objectives (up from 12 in 1983). These gains ranged from +0.1 to +10.8 with the median at +4.1. The most pronounced gains are observed in: addition of fractions (+5.3, objective 6); division of fractions (+6.1, objective 8); finding cost of a set of items (+7.8, objective 9); determining best buy (+8.2, objective 11); and subtraction of decimals (+10.8, objective 16).

Longitudinal examination of the 1982 through 1985 data shows consistent growth on 9 objectives. These included: calculating wages (objective 12); subtraction of decimals (objective 16); finding take home pay (objective 10); percent/decimal equivalence (objective 19); addition of fractions (objective 6); subtraction of fractions (objective 7); finding average (objective 4); division of fractions (objective 8); and division of decimals (objective 18).

TABLE IV. 1983 AND 1985 RESULTS FOR MATHEMATICS-GRADE 8

OBJECTIVE	OBJ NO	1985 TCHR EXP	1983 % MTG EXP	1985 % MTG EXP	1985 ITEM NOS
SUBTRACTION	1	2	97.0	97.1	1, 2, 3
MULTIPLICATION	2	2	96.5	97.0	4, 5, 6
FIND THE COST OF A SET OF ITEMS	9	2	84.0	91.8	58, 50, 60
CALCULATE WAGES	12	2	87.3	91.1	43, 44, 45
SUBTRACTION OF DECIMALS	16	2	79.5	90.3	19, 20, 21
MULTIPLICATION OF DECIMALS	17	2	87.8	90.3	22, 23, 24
CALCULATE TAKE-HOME PAY	10	2	85.2	88.4	46, 47, 48
DIVISION	3	2	88.4	88.2	7, 8, 9
PERCENT/DECIMAL EQUIVALENCE	19	2	83.2	85.5	31, 32, 33
ROUNDING DECIMAL NUMBERS	13	2	75.5	81.7	34, 35, 36
ADDITION OF FRACTIONS	6	2	76.1	81.4	10, 11, 12
SUBTRACTION OF FRACTIONS	7	2	79.3	80.6	13, 14, 15
FINDING AVERAGE	4	2	76.0	80.4	28, 29, 30
DIVISION OF FRACTIONS	8	2	74.1	80.2	16, 17, 18
ESTIMATE USING A SCALE	15	2	80.3	70.1	55, 56, 57
MAKING CHANGE	14	2	69.6	57.2	37, 38, 39
DETERMINING BEST BUY	11	2	48.8	57.0	40, 41, 42
COMPUTING AREA/PERIMETER	5	2	56.4	53.8	49, 53, 54
DIVISION OF DECIMALS	18	2	69.7	50.5	25, 26, 27
DESCRIBING RELATIONSHIPS IN EQUIVALENT FORM	20	2	62.1	46.0	50, 51, 52

Negative growth occurred on 6 objectives. The range was from -0.2 to -19.2 with a median of -11.3. Decreases on four objectives were dramatic and should be of major concern. These objectives were: estimation using a scale (-10.2, objective 15); making change (-12.4, objective 14); describing relationships in equivalent form (-16.1, objective 20); and division of decimals (-19.2, objective 18). Steady declines have been present since 1982 on division of whole numbers (objective 3) and estimation using a scale.

Generally, Kansas 8th graders can:

- compute with whole numbers (objectives 1, 2 and 3),
- apply skills to calculate wages (objective 12), determine take home pay (objective 10) and find total cost (objective 9),
- subtract and multiply decimals (objectives 16 and 17),
- find percent/decimal equivalence (objective 19),
- add, subtract and divide fractions (objectives 6, 7 and 8),
- round decimal numbers (objective 13), and
- find average (objective 4).

Approximately 10%-30% of the students found difficulty with objectives related to:

- estimation using a scale (objective 15),
- making change (objective 14),
- determining best buy (objective 11),
- computing area and perimeter (objective 5),
- division of decimals (objective 18), and
- describing relationships in equivalent form (objective 20).

The objectives comprising the bottom five in Table IV have occupied that dubious position in the last three 8th grade examinations. Though some growth has occurred in student ability to determine best buy, the others declined from 1983 to 1985 and, in general, returned to the low levels observed in 1982.

From an applications of mathematics perspective, it is abominable that only some 54%-57% of the students met expectations on making change, determining best buy, and finding area perimeter.

Students did well on multiplying decimals (90.3%). Why did only 50.5% meet expectations on division of decimals? In both cases the decimal must move, though one is the mathematical inverse of the other. Are we teaching rote operation without conceptual understanding?

The most disconcerting performance was, however, in describing relationships in equivalent forms. Only 46% met expectations on this mathematically basic concept. The meaning of "equals" is a fundamental concept which Kansas 8th graders do not sufficiently understand.

Student understanding of equality at grade 8 is too often taken for granted. Clearly this is an erroneous assumption. Teachers should consider demonstrating the meaning of equality by using manipulatives such as number balances, equal arm balances, paper cutting, Cuisenaire rods, and fraction bars. The textbook approach to manipulation of abstract numbers is failing to assure learning of the concept of equality.

Algebra teachers should note the above observations and adopt, early in each year, an instructional approach which emphasizes equality from a concrete basis. Doing so and requiring students to demonstrate their learning with similar manipulative tools may prevent the need for the oft heard admonishment to "do the same thing on both sides of the equal sign".

In summary, Kansas eighth grade students demonstrated the following distribution relative to teacher expectations on the 1985 examination:

90% or more of the students met expectations on 6 objectives (up from 2 in 1983 and 4 in 1982),
80% or more of the students met expectations on 14 objectives (up from 9 in 1983 and 8 in 1982),
70% or more of the students met expectations on 15 objectives (the same as in 1983 and up from 13 in 1982),
50% or more of the students met expectations on 19 objectives (the same as in 1983 and up from 18 in 1982), and
46% of the students met expectations of all 20 objectives (down from 48% in 1983 and up from 42% in 1982).

TENTH GRADE RESULTS

Table V contains the 1985 grade 10 Kansas Minimum Competency Test performances by objective. The 1983 eleventh grade results are not included because comparison would be invalid.

TABLE V. 1985 RESULTS FOR MATHEMATICS-GRADE 10

OBJECTIVE	OBJ NO	1985 TCHR EXP	1985 % MTG EXP	1985 ITEM NOS
READ AND INTERPRET GRAPHS	1	2	93.2	34, 35, 36
SAVINGS FOR A PURCHASE	8	2	91.6	13, 14, 15
TOTAL COST OF ITEMS	7	2	91.1	37, 38, 39
APPLY PROPORTION	18	2	86.9	10, 11, 12
MEASUREMENT	19	2	85.9	52, 53, 54
FIND AVERAGE	2	2	84.5	7, 8, 9
RECIPE CONVERSION	15	2	84.3	22, 23, 24
MAKE CHANGE	10	2	83.1	25, 26, 27
ESTIMATE USING A SCALE	16	2	81.5	58, 59, 60
CHECK SALES SLIP	12	2	77.5	43, 44, 45
DETERMINE MONTHLY PAYMENT	6	2	74.5	4, 5, 6
RECONCILE CHECK BOOK	9	2	73.8	46, 47, 48
APPLICATIONS OF FRACTIONS	11	2	73.8	16, 17, 18
ALGEBRAIC RATE PROBLEM	20	2	69.4	1, 2, 3
APPLICATION OF AREA	3	2	69.0	49, 50, 51
SIMPLE INTEREST	14	2	68.1	19, 20, 21
DETERMINE TAKE-HOME PAY	5	2	67.4	55, 56, 57
APPLYING FORMULAS	17	2	66.2	40, 41, 42
CALCULATE SAVINGS ON DISCOUNT	13	2	64.6	31, 32, 33
MOST ECONOMICAL BUY	4	2	60.2	28, 29, 30

All grade 10 objectives are, as mandated by law, applications oriented.

Tenth graders are generally able to interpret graphs, determine savings for a purchase, find total cost of a set of items, apply proportion, measure, determine an average, convert recipes, make change, and estimate using a scale.

Performance on checking a sales slip, determining a monthly payment, reconciling checkbooks, and applying fractions was marginal (all were in the 74% to 78% range).

More difficulty was encountered by 10%-20% of the students on:

- algebraic rate problems (objective 20),
- application of area (objective 3),
- finding simple interest (objective 14),
- determining take-home pay (objective 5),
- applying formulas (objective 17),
- calculating savings on discount (objective 13), and
- finding most economical buy (objective 4).

Most 10th grade students in Kansas take Algebra I, Geometry or Algebra II courses depending upon the school's course of studies and/or the student's past performance in mathematics. These courses tend to deal in the more abstract as opposed to applied areas of mathematics. However, analysis of the mathematical content underlying the twenty 10th grade objectives will reveal that many involve some application of Algebra or Geometry.

It is recommended that each teacher of a mathematics course involving tenth grade students review these objectives, analyze their content and assure that instruction relative to these applications is provided.

Tenth grade performance demonstrated the following distribution relative to teacher expectations in 1985:

90% or more of the students met teacher expectations on 3 objectives,
80% or more of the students met teacher expectations on 9 objectives,
70% or more of the students met teacher expectations on 13 objectives, and
60% or more met teacher expectations on all 20 objectives.

CONCLUSIONS

In conclusion, performance on the Kansas Minimum Competency Test should be higher than it has been. Typically the objectives on these tests are introduced in most textbooks at least one grade level before (and often earlier) than they are tested on the KMCT.

The position that mathematics performance should be higher arises (as it has in the past) from a comparison of reading and mathematics results on the minimum competency test. The comparisons for 1985 are shown in Table VI.

Table VI. Comparison of Reading and Mathematics Results

Kansas Minimum Competency Test-1985

Level	Reading Results	Mathematics Results
2nd	92.4%	93.6%
4th	86.8%	83.3%
6th	82.6%	75.9%
8th	93.3%	68.8%
10th	87.4%	68.9%

In 1985, mathematics performance exceeded reading only at grade 2. At all other levels reading performance exceeded mathematics. Why does reading performance tend to remain high across levels while mathematics performance tends to decline? The following are suggested for your consideration.

First, the number of mathematics application objectives in the KMCT program increases from zero at grade 2 to all 20 at grade 10. Second, reading instruction is increasingly an applications approach as students move through their program. In mathematics, applications tend to be instructionally isolated at all levels. Third, the level of expectation for student performance in mathematics seems to decrease while remaining high in reading. It is, in other words, more socially acceptable to have difficulty in mathematics than in reading.

RECOMMENDATIONS

The observations in this study lead to the following specific recommendations for use of your 1985 Kansas Minimum Competency Test data. Similar recommendations were made in a 1982 article (1) and again in a 1983 report (2). They are here restated and expanded to reflect some changes since the earlier papers were written.

1. Compare your school (or district) 1985 KMCT results with the results shown in Tables I through V. Analyze your data by comparison to the state results. Consider asking yourself the following questions:
   a. How do the differences between my 1983 and 1985 test results compare to the state results?
   b. Based upon these differences, did my school show growth or not?
   c. If other group test data (ITBS, SRA, DAT, TAP, etc.) are included in my analysis, will it be possible to determine if my students performed up to expectation?

   The state results are your main point of reference for determining strengths and weaknesses. However, additional data should be incorporated in your analysis when it is available.
2. Incorporate mathematics applications into instruction on a daily basis. Relate the mathematical concepts and skills you teach to the students' real world. Reading always relates, so does mathematics. Sometimes these relationships are not as obvious in mathematics, but they are there.
3. Encourage students to practice mathematics applications just as they are encouraged to read the newspaper and library books.
4. Devote as much time to mathematics instruction in the intermediate grades as is spent on reading instruction.
5. Elevate your expectations for student performance in mathematics at all levels. Promote an "I can math" attitude just as strongly as you promote "I can read".
6. Build a mixed drill activity into your class schedule every day. It is perfectly legitimate to have students working on problems from previous lessons constantly. Five to ten mixed problems every day the first few minutes of the morning will create a positive change in mathematics learning.
7. Consider using items from the 1982, 1983 and 1985 tests for instructional purposes during the school year. The items give an excellent interpretation of what the objectives mean. This practice is not teaching the test because the test items change each year. They have to because this is not a "secure" test. The objectives will, however, remain relatively constant and you will know well in advance of any objectives changes.

   If you do elect to use old items for instructional purposes, they will be an excellent source of material for the mixed drill items as suggested in 6 above. Also, by reference to earlier Kansas State Department of Education publications (3, 4, 5), you have a ready source of data to determine if your students are achieving.

8. Read David Johnson's book entitled *Every Minute Counts* (8) and examine the article "Making Problem Solving Real" (9).

This report is submitted for your consideration. It is not presented as the definitive statement on the 1985 KMCT experience, but it can serve as a point from which you might view your KMCT results. The analysis you do for your own school or district results is the most important benefit from the test. The ultimate value of this program resides with each of us and how we use the data.

REFERENCES

1. Parks, T. E. and Deborah A. Cheves, Kansas Minimum Competency Test 1982-Mathematics, Bulletin of the Kansas Association of Teachers of Mathematics, October, 1982.
2. Parks, T. E. and Deborah A. Cheves, Kansas Minimum Competency Test 1983-Mathematics, Bulletin of the Kansas Association of Teachers of Mathematics, October, 1983.
3. Kansas Minimum Competency Assessment Report, School Year 1982/1983. Kansas State Department of Education, August, 1982.
4. Kansas Minimum Competency Assessment Report, School Year 1984/1985. Kansas State Department of Education, June, 1985.
5. Kansas Minimum Competency Assessment Report, School Year 1981/1982. Kansas State Department of Education, August, 1982.
6. Miller, D., Burry, J., Glasnapp, D., and John Poggio, Memorandum to Chief School Administrators, Accredited Kansas Public and Private Schools, RE: Report of state and district performance trends, August, 1985.
7. _____, *An Agenda for Action*, National Council of Teachers of Mathematics, Reston, VA (1980).
8. Johnson, D., *Every Minute Counts in Your Math Classroom*, Dale Seymour Publications, Palo Alto, CA (1982).
9. Cheves, D. A. and Terry E. Parks, "Making Problem Solving Real", Educational Leadership 41,4(1983-84): 54-57.

KANSAS MINIMUM COMPETENCY TESTS
PASSING PERCENTAGES FOR EQUIVALENT PASSING SCORES

		Yearly Performance				Accoumulated Gains/Loss	
Grade	Content	1980	1982	1983	1985	1983-1985	1980-1985
2	Reading	75.18	76.93	78.75	81.77	3.02	6.59
	Mathematics	94.52	95.52	97.42	97.23	-.19	2.71
4	Reading	78.79	84.69	81.97	87.84	5.87	9.05
	Mathematics	71.79	72.07	76.74	75.93	-.81	4.14
6	Reading	67.75	68.07	70.75	75.10	4.35	7.35
	Mathematics	71.45	72.27	75.02	78.94	3.92	7.49
8	Reading	77.85	79.50	81.05	84.36	3.31	6.51
	Mathematics	66.97	68.99	75.26	76.64	1.38	9.67
10	Reading				87.43		
	Mathematics				68.93		

KANSAS MINIMUM COMPETENCY TESTS RESULTS

The tables found in the following pages indicate the scores for every public and private school district having students taking the April 1985 Kansas Minimum Competency Tests. For each table there are four columns which provide the fillowing information:

USD NO: The first column indicate school district number. Private schools have been grouped into district configurations conforming to their affiliations (e.g. Kansas City Diocesan School, Kansas Lutheran Schools).

SCHOOL DISTRICT NAME: The school district name is presented in its abbreviated form. The school district names are ordered from low to high by the districts number.

NO. TESTED: This column indicates the number of students taking each test in April, 1985.

% MEETING STANDARD: The percentage of all of the district students tested who obtained a total score equal to or greater than the score established as indicating minimal competence. The total score standards of minimal performance were set by the State Board of Education. These minimum standards are the number of items to be answered correctly on each test in order for a student to be considered minimally competent on the test.

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

	GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
	READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
101 ERIE-ST PAUL	99	98	97	100	87	79	87	69	79	67	79	54	89	83	88	47	95	78	96	70
102 CIMARRON-ENSIGN	57	98	57	96	38	100	38	97	45	84	45	69	30	89	30	83	43	98	43	81
103 CHEYLIN	22	100	22	86	13	92	13	85	17	88	17	71	16	94	16	75	15	93	15	93
104 WHITE ROCK	17	94	17	100	8	100	8	88	16	100	16	88	9	100	9	89	17	82	17	71
200 GREELEY COUNTY	28	82	28	96	29	83	29	90	26	88	26	73	10	80	10	30	27	81	27	56
202 TURNER-KANSAS CITY	254	94	255	93	242	88	241	77	208	75	208	57	287	91	281	43	231	83	231	61
203 PIPER-KANSAS CITY	57	86	57	82	66	86	66	83	67	63	67	61	75	89	75	44	62	74	62	52
204 BUNNER SPRINGS	138	96	138	96	143	87	143	82	141	84	141	84	108	95	100	70	130	82	130	59
205 LEON	46	87	46	98	48	85	51	73	48	83	48	85	45	98	45	78	51	84	51	57
206 REMINGTON-WHITEWATER	40	90	40	85	22	91	22	82	32	88	32	84	45	100	45	80	38	97	38	76
207 FT LEAVENWORTH	188	98	188	97	175	93	175	89	168	96	168	86	160	97	160	90	.	.	.	.
208 WAKEENEY	57	100	57	100	49	100	49	100	30	97	30	100	46	93	45	96	52	90	52	74
209 MOSCOW PUBLIC SCHOOLS	14	93	14	57	13	100	13	100	8	100	8	88	12	75	12	67	11	82	11	55
210 HUGOTON PUBLIC SCHOOLS	66	94	66	92	58	91	58	88	60	93	60	87	64	81	64	58	57	96	57	86
211 NORTON COMMUNITY SCHOOLS	.	.	.	.	1	100	1	100	13	92	13	92	73	96	73	73	59	80	59	80
212 NORTHERN VALLEY	15	73	15	87	13	100	13	100	24	92	24	88	14	100	14	100	26	96	26	85
213 WEST SOLOMON VALLEY SCHOOLS	8	100	8	100	11	91	11	91	12	83	12	83	5	100	5	40	17	94	17	82
214 ULYSSES	124	91	123	86	105	86	105	83	101	88	100	71	110	92	110	62	84	77	84	61
215 LAKIN	57	91	56	91	46	98	46	85	52	81	52	65	63	90	63	56	41	90	41	83
216 DEERFIELD	24	83	24	92	17	82	17	94	12	100	12	83	18	72	18	39	18	89	18	67
217 HOLLA	18	94	18	94	10	90	10	90	14	71	14	64	12	100	12	83	8	88	8	88
218 ELKHART	50	90	50	90	55	80	55	80	39	82	39	49	84	92	84	69	31	94	31	81
219 MINNEOLA	19	95	19	95	12	75	11	64	14	93	14	86	12	92	12	92	17	100	17	88
220 ASHLAND	17	88	17	100	13	92	13	92	18	78	18	61	24	92	24	46	15	93	15	80
221 NORTH CENTRAL	19	100	19	100	9	89	9	78	12	92	12	83	14	93	14	50	15	93	15	73
222 WASHINGTON SCHOOLS	39	92	38	84	40	93	40	88	30	86	30	72	27	81	27	59	29	93	29	72
223 BARNES	18	89	18	100	31	90	31	90	23	91	23	91	20	100	20	90	58	78	58	79
224 REPUBLICAN VALLEY	25	100	25	100	29	93	29	93	22	95	22	86	24	100	24	88	32	88	32	63
225 FOWLER	9	100	9	100	9	100	9	89	5	100	5	100	13	92	13	54	12	100	12	75
226 MEADE	21	100	21	100	30	100	30	100	25	92	25	92	28	100	28	93	28	80	28	75
227 JETMORE	20	95	20	95	19	84	19	89	25	80	25	88	24	96	24	46	17	94	17	94
228 HANSTON	11	100	11	100	9	89	9	78	13	100	13	77	9	100	9	78	3	100	3	67
229 SOUTHEAST JOHNSON CO	333	97	330	96	314	97	314	92	310	91	314	80	397	96	390	75	338	97	338	79
230 SPRING HILL	106	94	106	91	91	91	90	91	97	82	97	53	108	97	108	84	71	89	71	70
231 GARDNER-EDGERTON-ANTIOCH	124	98	126	100	103	90	103	92	119	94	119	92	117	96	117	71	119	89	119	82
232 DESOTO	128	95	128	98	119	97	119	93	122	89	122	88	122	95	120	80	124	97	124	79
233 OLATHE	807	98	803	96	720	94	723	91	688	89	687	82	751	95	750	78	665	94	665	86
234 FT SCOTT	142	98	141	99	134	95	134	92	145	83	145	84	157	95	157	71	138	77	138	57
235 UNIONTOWN	32	100	32	97	43	80	43	77	37	81	30	75	45	98	44	84	32	75	32	63
237 SMITH CENTER	59	100	59	98	54	89	54	81	62	85	62	81	63	95	63	78	47	87	47	70
238 WEST SMITH COUNTY	17	0	17	0	17	88	17	70	8	88	8	88	13	85	13	46	18	78	18	39
239 NORTH OTTAWA COUNTY	59	97	59	95	39	82	39	82	30	87	30	84	48	90	48	81	30	82	30	58
240 TWIN VALLEY	34	100	34	100	33	91	33	79	37	95	37	73	38	97	38	74	32	91	32	75
241 WALLACE COUNTY SCHOOLS	29	97	29	100	23	91	23	91	29	86	29	69	25	96	27	85	33	97	33	87
242 WESMAN	0	83	6	100	8	88	8	63	7	100	7	71	8	100	8	75	8	88	8	88
243 LEBO-WAVERLY	32	100	32	100	30	80	37	95	38	84	37	89	45	96	44	59	45	87	45	84
244 BURLINGTON	97	98	98	98	82	90	82	89	93	96	93	96	94	100	94	74	90	83	91	72
245 LEHOT-GHILEY	17	100	17	100	25	84	25	80	35	94	35	91	23	100	23	87	33	91	33	79

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

		GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
		READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
		NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
246	NORTHEAST	40	78	39	87	47	74	42	69	41	83	41	76	36	83	36	86	35	77	34	76
247	CHEROKEE	60	95	60	92	48	85	48	73	57	82	57	56	69	91	69	70	47	83	47	70
248	GIRARD	88	94	88	92	88	89	88	89	80	75	80	70	98	99	98	76	85	95	85	84
249	FRONTENAC PUBLIC SCHOOLS	31	90	31	77	32	88	32	78	23	74	23	70	34	85	34	53	39	92	39	74
250	PITTSBURG	228	98	228	98	193	95	193	94	188	89	187	81	210	96	210	76	192	95	193	88
251	NORTH LYON COUNTY	61	95	61	100	59	83	59	83	53	85	53	79	62	97	62	87	37	86	37	73
252	SOUTHERN LYON COUNTY	50	94	50	98	25	96	25	80	33	58	33	70	43	95	43	74	38	95	38	71
253	EMPORIA	318	94	317	97	266	94	266	90	281	83	282	81	335	94	334	51	282	91	281	71
254	BARBER COUNTY NORTH	67	91	67	84	50	84	50	80	51	86	51	78	57	98	58	66	39	87	39	64
255	SOUTH BARBER	22	95	22	95	25	96	25	92	26	88	26	81	30	93	30	67	18	89	19	84
256	MANHATTAN VALLEY	20	70	20	85	25	84	25	76	17	76	17	59	33	94	33	58	24	75	24	75
257	IOLA	157	96	157	99	110	97	110	90	138	88	138	91	135	97	136	81	106	91	106	75
258	HUMBOLDT	58	93	57	91	37	86	37	89	34	91	34	91	47	94	47	57	41	88	41	88
259	WICHITA	3192	84	3164	88	2968	77	2957	76	2756	73	2742	66	2616	88	2605	57	2811	81	2783	58
260	DERBY	360	84	356	89	334	87	333	80	336	81	336	80	314	93	312	56	324	88	325	77
261	HAYSVILLE	234	92	234	93	218	86	218	77	219	83	217	72	199	96	201	65	208	82	208	54
262	VALLEY CENTER PUBLIC SCHOOLS	127	98	127	98	142	88	142	80	119	97	118	90	155	94	155	66	129	88	128	75
263	MULVANE	124	97	124	96	120	97	120	88	126	84	126	77	132	97	132	85	112	95	112	76
264	CLEARWATER	69	96	69	100	67	91	67	96	59	81	59	78	84	97	84	84	81	89	81	82
265	GODDARD	108	90	104	90	116	88	116	82	101	88	102	81	151	96	151	76	116	96	115	78
266	MAIZE	113	91	113	99	103	80	103	75	89	91	89	84	98	97	98	88	74	80	74	70
267	RENWICK	91	97	92	96	100	95	100	95	88	90	86	88	133	95	131	79	89	76	89	69
268	CHENEY	45	98	45	100	53	100	53	91	37	95	37	84	35	97	35	83	35	94	35	71
269	PALCO	17	100	17	100	21	86	21	81	13	92	13	85	23	96	23	83	15	93	15	93
270	PLAINVILLE	38	100	38	100	32	97	32	97	29	90	29	83	45	100	45	91	53	83	53	80
271	STUCKTON	32	97	32	100	32	94	32	100	33	82	33	94	47	96	47	89	35	74	35	37
272	WACONDA	49	90	49	86	44	84	44	66	47	83	47	83	45	96	45	78	44	93	44	82
273	BELOIT	68	96	68	88	61	82	61	90	67	93	67	91	59	98	59	86	56	93	55	71
274	OAKLEY	28	100	27	100	24	100	24	100	20	100	20	95	47	91	47	81	36	97	36	83
275	TRIPLAINS	13	92	13	85	12	92	12	83	6	67	6	100	6	100	6	67	8	88	8	88
278	MANKATO	23	100	23	100	24	88	24	79	23	78	23	87	26	81	25	76	20	90	20	90
279	JEWELL	12	100	12	100	20	100	20	100	11	91	11	73	16	88	16	38	13	100	13	85
280	WEST GRAHAM-MORLAND	10	100	10	100	9	100	9	100	11	91	11	91	10	90	10	80	12	100	12	92
281	HILL CITY	57	98	57	98	41	90	41	93	28	89	28	93	43	91	43	86	29	83	29	82
282	WEST ELK	37	100	36	100	46	85	46	76	30	93	31	97	34	97	34	71	32	94	32	78
283	ELK VALLEY	11	100	11	100	7	57	7	86	14	57	14	36	11	73	11	36	20	75	20	45
284	CHASE COUNTY	41	95	41	100	36	94	36	92	40	83	40	68	51	94	51	98	43	88	43	70
285	CEDAR VALE	19	89	19	95	15	73	15	67	13	77	13	62	14	86	14	57	13	77	13	77
286	CHAUTAUQUA COUNTY COMMUNITY	32	100	32	97	36	83	36	78	33	97	33	79	38	97	38	55	43	91	43	81
287	WEST FRANKLIN	63	81	62	89	35	80	35	71	56	84	56	68	55	85	55	67	60	83	60	81
288	CENTRAL HEIGHTS	30	97	30	87	25	100	25	96	35	83	35	83	33	85	33	58	51	90	51	80
289	WELLSVILLE	59	92	59	97	54	72	55	65	48	81	48	73	52	90	52	77	49	90	49	53
290	OTTAWA	163	98	161	98	162	77	162	72	134	75	134	73	169	89	165	67	141	89	141	87
291	GRINNELL PUBLIC SCHOOLS	7	100	7	100	8	100	8	100	10	90	10	80	20	100	20	90	18	100	18	83
292	GRAINFIELD	13	100	13	100	22	95	22	95	13	100	13	100	17	94	17	76	19	100	19	95
293	QUINTER PUBLIC SCHOOLS	31	100	31	100	27	93	27	85	25	100	25	88	22	95	22	77	18	100	18	67
294	OBERLIN	59	100	59	98	34	100	34	100	44	95	45	93	82	92	82	80	44	84	44	84
295	PRAIRIE HEIGHTS	10	90	10	100	6	83	6	100	5	80	5	80	7	86	7	86	7	100	7	86

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

	GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
	READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
297 ST FRANCIS COMMUNITY SCHOOLS	40	80	40	98	33	70	33	64	34	82	34	71	31	100	31	81	41	88	41	88
298 LINCOLN	40	100	40	100	35	100	35	100	29	100	29	97	28	93	28	75	27	89	27	74
299 SYLVAN GROVE	18	100	18	100	23	100	22	100	9	100	10	100	16	100	16	81	17	76	17	76
300 COMMANCHE COUNTY	32	97	33	94	29	83	29	83	22	86	22	91	28	96	28	75	30	97	30	87
301 NES TRES LA GO	6	100	6	100	7	100	7	57	4	100	4	100	8	75	8	75	10	100	10	100
302 SMOKY HILL	15	87	15	93	16	88	16	75	11	91	11	100	12	100	12	92	10	100	10	80
303 NESS CITY	31	100	31	100	29	97	29	90	28	93	28	57	23	100	23	91	30	90	30	73
304 BAZINE	5	100	5	100	8	100	8	100	5	100	5	100	12	100	12	83	12	100	12	83
305 SALINA	514	95	512	92	496	90	494	86	475	87	475	84	513	94	515	73	521	89	521	87
306 SOUTHEAST OF SALINE	39	100	39	100	42	95	42	90	38	89	38	92	52	98	52	62	49	92	49	65
307 ELL-SALINE	24	100	24	96	22	100	22	95	24	92	24	83	24	100	24	83	15	93	15	67
308 HUTCHINSON PUBLIC SCHOOLS	379	99	378	98	331	93	332	93	339	92	338	93	359	94	358	57	291	86	289	56
309 NICKERSON	97	98	97	100	97	94	96	90	98	89	98	93	99	99	100	90	93	100	93	94
310 FAIRFIELD	37	97	37	92	36	86	36	86	34	71	34	62	42	90	42	64	31	97	31	55
311 PRETTY PRAIRIE	27	100	27	100	18	94	18	83	19	95	19	74	23	96	23	70	21	90	21	86
312 HAVEN PUBLIC SCHOOLS	97	96	97	82	89	91	89	83	75	89	75	85	74	97	74	62	65	86	65	54
313 BUHLER	155	99	155	98	158	97	157	93	138	97	137	98	174	100	174	84	146	92	146	79
314 HOWSTER	10	90	10	100	12	92	12	100	14	93	14	86	17	100	16	81	11	100	11	91
315 COLBY PUBLIC SCHOOLS	102	100	100	99	79	96	79	94	86	93	86	87	91	89	91	70	86	88	86	65
316 GOLDEN PLAINS	13	100	13	100	14	100	14	100	9	89	9	67	15	100	15	73	25	96	25	76
317 HERNDON	4	75	3	67	4	100	4	75	7	86	7	71	7	71	7	57	11	64	11	18
318 ATWOOD	32	94	32	97	28	93	28	100	30	93	30	93	33	97	33	85	27	81	27	59
320 WAMEGO	94	95	94	85	76	88	76	75	93	88	93	75	83	98	83	86	91	92	91	75
321 KAW VALLEY	83	94	82	85	59	83	59	81	69	90	69	77	80	99	80	79	101	95	101	73
322 ONAGA-HAVENSVILLE-WHEATON	32	88	32	100	30	80	30	83	28	64	28	50	29	97	29	79	31	87	31	74
323 WESTMORELAND	35	86	35	91	31	100	31	97	40	88	40	83	49	96	49	82	42	90	42	69
324 EASTERN HEIGHTS	15	100	15	100	18	78	18	72	8	75	8	75	18	94	18	61	17	82	17	65
325 PHILLIPSBURG	54	100	54	100	43	86	43	86	47	85	47	85	55	98	55	76	68	85	68	71
326 LOGAN	18	100	18	100	23	91	23	91	18	78	18	89	16	94	16	63	23	96	23	78
327 ELLSWORTH	55	100	55	98	46	93	46	98	54	85	54	85	51	92	51	65	65	91	65	63
328 LOHRAINE	45	93	44	98	33	91	33	94	34	82	34	85	43	88	43	81	55	87	55	67
329 ALMA	31	97	31	94	20	90	20	95	20	81	25	84	51	98	51	78	50	88	49	61
330 WABAUNSEE EAST	40	100	40	98	33	94	33	85	34	88	34	74	46	96	46	74	48	98	48	90
331 KINGMAN	86	98	86	98	81	95	81	90	73	82	74	78	97	97	97	77	72	93	71	69
332 CUNNINGHAM	35	100	35	100	29	86	29	76	19	74	19	74	22	100	22	91	14	93	14	86
333 CONCORDIA	108	93	107	96	108	89	108	96	105	97	105	87	107	97	107	85	96	97	96	86
334 SOUTHERN CLOUD	17	88	17	100	20	85	20	80	26	77	26	62	25	96	25	60	22	91	22	64
335 NORTH JACKSON	31	100	31	100	27	100	27	96	35	97	35	94	55	98	55	96	51	96	51	84
336 MOLTON	66	100	66	100	69	99	69	97	49	96	50	100	70	96	70	91	78	96	78	73
337 HAYETTA	73	100	73	100	45	100	45	100	45	98	45	96	62	100	62	95	59	95	59	83
338 VALLEY FALLS	32	100	31	100	30	90	30	93	30	93	30	87	31	90	31	74	30	90	30	63
339 JEFFERSON COUNTY NORTH	29	100	29	93	27	81	27	74	27	85	27	85	32	84	31	68	42	81	42	71
340 JEFFERSON WEST	46	98	46	96	47	89	47	79	44	91	44	89	76	97	76	78	63	89	63	75
341 OSKALOOSA PUBLIC SCHOOLS	36	89	36	86	34	74	34	68	23	87	23	57	37	100	37	54	37	89	37	49
342 MCLOUTH	38	100	39	100	36	86	36	81	36	75	36	81	29	100	28	61	33	88	33	61
343 PERRY PUBLIC SCHOOLS	50	88	49	98	44	86	44	91	57	84	56	71	48	98	48	73	71	94	71	72
344 PLEASANTON	30	100	30	97	24	100	24	100	21	95	21	95	32	100	32	88	29	100	29	100
345 SEAMAN	212	98	211	97	225	82	224	79	249	84	245	82	278	93	275	72	283	99	283	85

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

		GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
		READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
		NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
346	JAYHAWK	36	97	36	86	47	94	49	94	33	85	33	79	41	98	41	68	38	87	38	66
347	KINSLEY-OFFERLE	27	100	27	100	20	95	20	85	23	96	23	91	24	83	24	96	23	78	23	52
348	BALDWIN CITY	77	94	77	97	64	97	64	94	45	91	45	87	75	95	75	79	62	87	62	56
349	STAFFORD	23	96	23	83	25	96	25	88	24	83	24	83	19	100	19	89	22	95	22	64
350	ST JOHN-HUDSON	25	100	25	100	37	92	37	95	22	91	22	95	33	97	33	85	25	100	25	84
351	MACKSVILLE	12	100	12	100	22	86	22	86	13	92	13	69	26	96	26	62	14	79	14	79
352	GOODLAND	92	96	91	93	92	89	92	82	85	81	84	54	99	94	101	62	94	87	96	73
353	WELLINGTON	164	93	162	92	138	90	136	81	108	83	108	86	127	96	127	71	110	92	110	66
354	CLAFLIN	14	100	14	100	16	100	16	100	13	85	13	92	20	100	20	80	34	91	34	74
355	ELLINWOOD PUBLIC SCHOOLS	40	95	40	100	40	75	40	78	37	76	37	73	39	97	38	68	40	83	40	68
356	CONWAY SPRINGS	16	81	16	94	16	100	16	94	31	77	31	68	43	88	40	45	36	81	33	55
357	BELLE PLAINE	42	88	42	98	50	92	50	96	56	79	56	66	46	93	47	64	37	95	37	73
358	OXFORD	34	97	34	94	31	94	31	81	31	77	31	90	33	100	34	76	34	74	34	38
359	ARGONIA PUBLIC SCHOOLS	14	100	15	100	12	92	12	92	17	88	17	71	23	100	23	70	14	79	14	43
360	CALDWELL	28	100	28	96	24	88	24	88	22	82	22	73	19	100	19	74	23	96	23	83
361	ANTHONY-HARPER	90	96	89	97	76	93	76	92	66	89	66	92	68	99	68	90	85	85	86	76
362	PRAIRIE VIEW	58	98	58	100	55	76	55	65	52	83	52	73	64	73	64	53	54	81	54	52
363	HOLCOMB	39	95	39	90	48	81	48	85	45	82	45	80	45	93	45	53	40	80	40	45
364	MARYSVILLE	76	96	74	95	56	91	56	91	49	84	49	90	75	100	75	93	92	98	92	92
365	GARNETT	68	97	68	97	78	87	78	81	55	71	55	62	78	85	78	63	91	87	91	58
366	WOODSON	53	96	53	98	50	88	50	94	33	79	33	91	51	90	51	51	37	86	37	68
367	OSAWATOMIE	66	100	66	98	52	83	52	90	59	85	59	86	84	93	83	67	73	92	73	73
368	PAOLA	101	93	100	94	76	86	77	81	91	96	91	98	101	100	101	92	100	91	100	75
369	BURRTON	26	96	25	88	14	93	14	86	18	89	18	39	19	100	19	53	19	79	19	63
371	MONTEZUMA	14	93	14	100	17	82	17	88	20	85	20	70	10	100	10	90	8	100	8	75
372	SILVER LAKE	44	89	44	84	43	79	43	74	50	90	49	76	56	95	56	61	41	95	41	76
373	NEWTON	242	92	242	95	213	87	213	81	209	81	209	71	245	91	245	62	227	89	228	77
374	SUBLETTE	38	92	37	100	25	88	25	80	31	77	31	81	33	94	33	79	34	85	34	62
375	CIRCLE	79	96	78	95	65	95	65	91	86	85	88	83	89	94	89	62	74	88	74	72
376	STERLING	47	100	47	100	41	90	41	83	33	94	33	73	37	95	38	79	37	89	37	68
377	ATCHISON CO COMM SCHOOLS	73	96	73	95	50	94	50	92	58	79	58	69	69	87	70	81	68	75	68	53
378	RILEY COUNTY	45	98	45	93	35	97	35	97	35	89	35	94	32	97	32	91	34	74	34	62
379	CLAY CENTER	120	95	120	100	107	95	107	95	113	93	112	97	118	98	118	92	116	87	115	74
380	VERMILLION	51	84	51	90	37	86	37	95	41	80	41	68	49	98	49	63	44	95	44	84
381	SPEARVILLE-WINDTHORST	14	93	14	100	15	100	15	80	19	74	19	95	32	100	32	88	20	100	20	85
382	PRATT	105	100	105	99	95	84	95	83	106	93	106	96	92	96	91	85	83	92	83	83
383	MANHATTAN	425	97	424	96	371	89	371	87	352	88	350	75	387	96	386	80	384	90	384	76
384	BLUE VALLEY	14	100	14	100	12	92	12	100	13	92	13	100	10	100	9	100	13	92	13	85
385	ANDOVER	102	85	102	75	102	76	103	61	99	88	99	79	127	98	127	82	106	94	106	81
386	MADISON-VIRGIL	24	96	24	92	20	90	20	70	30	100	30	87	26	92	26	31	21	86	21	76
387	ALTOONA-MIDWAY	24	92	24	92	28	79	28	89	28	89	28	89	21	100	22	95	18	83	18	89
388	ELLIS	17	94	17	100	16	100	16	100	21	95	21	95	42	98	42	74	47	91	47	53
389	EUREKA	67	99	68	94	45	98	45	96	50	94	50	92	60	98	59	80	47	96	47	68
390	HAMILTON	8	100	8	88	15	93	15	87	5	80	5	80	11	91	11	55	9	78	9	56
392	OSBORNE COUNTY	33	100	32	100	43	95	43	95	33	79	33	55	38	97	38	61	27	93	27	78
393	SOLOMON	27	89	27	100	20	100	20	100	28	79	28	79	23	83	23	39	25	72	25	60
394	ROSE HILL PUBLIC SCHOOLS	106	93	104	97	78	77	75	79	89	72	89	54	101	92	101	61	86	93	86	87
395	LACROSSE	33	100	33	100	38	92	38	89	34	94	34	91	44	100	44	61	25	80	25	84

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

	GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
	READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
396 DOUGLASS PUBLIC SCHOOLS	54	93	54	96	51	90	51	92	45	80	45	78	38	92	36	72	32	88	32	47
397 CENTRE	26	100	26	100	18	83	18	100	30	100	30	100	32	97	32	72	30	80	30	57
398 PEABODY-BURNS	32	91	32	78	22	95	22	95	32	59	32	69	28	93	28	57	31	87	31	84
399 PARADISE	20	85	20	90	12	92	12	92	14	86	14	86	12	100	12	58	12	83	12	67
400 LINDSBORG	79	97	79	99	54	91	54	89	54	85	53	83	76	97	76	78	71	96	71	73
401 CHASE	14	100	14	64	18	89	18	89	17	88	17	94	13	100	13	92	15	93	15	93
402 AUGUSTA	123	92	123	95	120	87	120	79	108	79	102	81	132	91	132	58	110	94	110	67
403 OTIS-BISON	32	94	32	97	26	100	26	96	26	92	26	88	28	96	28	89	21	90	21	86
404 RIVERTON	53	96	53	98	50	88	50	78	50	88	50	90	63	83	63	46	42	98	42	90
405 LYONS	63	97	63	95	51	86	51	80	37	84	37	86	52	100	52	87	68	93	68	69
406 ATHENA	31	97	31	90	39	85	39	77	36	81	36	86	38	97	38	50	37	84	36	47
407 RUSSELL COUNTY	118	97	118	97	101	91	101	88	104	88	103	87	115	97	114	84	80	94	80	93
408 MARION	33	100	34	100	34	97	34	94	59	86	59	78	48	94	48	63	36	75	36	64
409 ATCHISON PUBLIC SCHOOLS	109	94	108	97	81	78	81	65	101	84	101	73	119	88	118	78	104	90	103	70
410 DURHAM-HILLSBORO-LEHIGH	39	95	39	92	38	100	38	100	35	94	35	89	39	100	39	97	40	100	40	93
411 GOESSEL	19	100	19	100	19	100	19	100	17	94	17	88	14	100	14	86	11	91	11	55
412 MOXIE COMMUNITY SCHOOLS	45	98	45	100	32	100	32	100	33	88	33	94	42	93	42	60	35	94	34	85
413 CHANUTE PUBLIC SCHOOLS	177	94	176	98	143	90	143	89	139	83	139	81	149	96	149	72	137	91	137	77
415 HIAWATHA	67	99	67	97	74	95	74	97	67	90	67	99	63	97	63	86	69	88	69	64
416 LOUISBURG	83	93	86	92	73	81	73	84	80	81	80	74	80	96	80	85	70	79	70	67
417 MORRIS COUNTY	74	97	73	99	82	78	82	77	70	74	70	67	82	84	82	51	61	92	61	82
418 MCPHERSON	139	100	139	99	145	97	144	98	150	89	147	87	150	98	150	79	157	99	157	90
419 CANTON-GALVA	36	63	32	56	25	92	25	84	28	93	28	93	33	97	33	82	32	94	32	88
420 OSAGE CITY	47	96	47	98	34	97	34	100	44	82	44	59	49	100	49	90	48	94	48	81
421 LYNDON	32	100	32	97	23	83	23	83	17	94	17	100	22	95	22	82	17	100	17	88
422 GREENSBURG	45	98	45	100	34	100	34	100	38	95	38	92	29	97	29	52	27	93	27	81
423 MOUNDRIDGE	31	97	31	100	26	92	26	92	19	84	19	84	29	97	30	73	28	100	28	93
424 MULLINVILLE	14	100	14	100	4	100	4	100	7	100	7	57	11	100	11	100	6	100	6	67
425 HIGHLAND	11	100	11	100	24	100	24	100	20	90	20	100	26	96	26	92	23	100	23	91
426 PIKE VALLEY	19	100	19	100	25	96	25	96	19	79	19	74	16	100	16	69	18	89	18	67
427 BELLEVILLE	55	95	55	100	36	89	36	81	44	84	44	80	31	100	31	97	54	91	52	79
428 GREAT BEND	264	95	263	97	199	93	199	89	211	84	210	77	271	96	271	82	212	89	205	83
429 TROY PUBLIC SCHOOLS	25	96	25	96	25	88	25	96	32	91	32	91	36	92	36	69	32	91	32	84
430 BROWN COUNTY	45	100	45	100	44	100	44	95	51	92	51	78	45	100	45	84	53	83	53	81
431 HOISINGTON	57	98	57	96	40	90	40	83	50	86	50	70	56	85	56	69	60	80	60	82
432 VICTORIA	40	100	40	100	38	89	38	97	29	97	29	100	38	95	38	95	28	86	28	54
433 MIDWAY SCHOOLS	14	100	14	100	13	100	13	100	16	81	16	69	30	93	30	47	17	94	17	65
434 SANTA FE TRAIL	104	97	104	91	84	80	84	65	80	80	80	80	92	93	92	87	80	88	80	89
435 ABILENE	93	95	92	97	77	84	77	90	90	90	90	82	123	92	121	74	107	93	107	84
436 CANEY VALLEY	68	99	67	99	63	86	63	83	67	88	67	93	77	82	77	53	55	82	55	53
437 AUBURN WASHBURN	190	95	189	98	182	92	182	93	177	90	177	87	234	95	236	81	217	88	217	70
438 SKYLINE SCHOOLS	41	100	41	100	36	94	36	94	22	73	22	82	24	96	24	54	23	91	23	70
439 SEDGWICK PUBLIC SCHOOLS	33	97	31	97	31	94	31	97	21	81	21	90	27	100	27	74	16	94	16	81
440 HALSTEAD	54	92	59	86	50	90	50	82	55	78	55	56	42	93	42	62	61	85	61	82
441 SABETHA	72	100	72	100	59	98	59	92	63	94	63	90	74	99	74	82	78	92	78	77
442 NEMAHA VALLEY SCHOOLS	17	100	17	100	16	94	17	100	20	95	20	90	17	100	17	94	46	93	46	91
443 DODGE CITY	283	96	281	99	275	84	274	83	229	81	220	73	243	88	243	56	274	90	264	81
444 LITTLE RIVER	28	96	28	100	28	93	28	86	29	86	29	86	26	100	26	96	24	96	24	71

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PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

	GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
	READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
445 COFFEYVILLE	231	94	229	96	213	75	213	77	194	74	194	67	201	86	200	51	215	80	215	52
446 INDEPENDENCE	173	98	173	97	169	85	169	81	167	84	167	68	186	94	186	76	185	92	185	82
447 CHERRYVALE	49	92	48	94	44	95	44	91	53	92	53	94	52	90	52	58	41	85	39	77
448 INMAN	35	100	35	100	23	96	23	100	24	88	24	83	26	100	26	92	24	100	24	96
449 EASTON	40	95	40	95	43	79	43	81	46	61	46	67	45	91	45	84	55	93	55	89
450 SHAWNEE HEIGHTS	194	97	193	97	214	95	213	92	223	92	222	87	255	95	252	77	264	94	264	77
451 B & B	17	100	17	100	22	100	22	91	22	95	22	100	22	100	22	95	29	93	29	96
452 STANTON COUNTY	36	97	36	100	32	91	32	94	36	61	36	53	48	100	48	67	35	83	35	54
453 LEAVENWORTH	254	88	249	94	256	79	259	76	275	72	277	67	304	87	301	67	358	84	358	65
454 BURLINGAME PUBLIC SCHOOLS	28	93	28	93	27	100	27	96	24	63	24	58	32	97	32	84	25	100	25	80
455 CUBA	16	100	16	81	15	93	15	93	13	85	13	100	16	88	16	75	13	69	13	46
456 MARAIS DES CYGNES VALLEY	26	96	26	96	29	90	29	90	18	67	18	67	25	100	27	100	21	86	21	81
457 GARDEN CITY	405	91	405	95	361	83	362	81	344	79	343	70	358	87	358	72	320	74	321	45
458 BASEHOR-LINWOOD	61	92	61	97	53	100	53	100	82	89	81	93	95	93	95	83	88	83	89	60
459 BUCKLIN	22	95	22	95	16	94	16	88	15	80	15	80	19	100	19	53	19	79	19	89
460 HESSTON	51	96	51	94	62	95	62	89	59	88	59	75	74	100	74	70	42	93	42	86
461 NEODESHA	56	89	56	98	51	88	51	92	65	80	65	77	60	90	60	80	59	83	59	71
462 CENTRAL	31	87	31	90	40	70	40	75	25	76	25	96	32	94	32	69	37	73	37	41
463 UDALL	29	97	29	100	25	84	25	84	27	93	27	63	31	100	31	58	27	81	27	33
464 TONGANOXIE	89	93	90	100	73	90	73	88	73	96	73	95	101	100	101	86	95	96	94	82
465 WINFIELD	161	91	161	99	149	84	149	85	169	76	168	80	159	91	159	81	175	91	175	74
466 SCOTT COUNTY	80	96	80	99	88	88	88	76	81	84	81	86	99	96	99	52	81	86	81	62
467 LEOTI	47	98	47	96	38	71	38	66	42	71	42	62	49	96	49	90	34	82	34	59
468 HEALY PUBLIC SCHOOLS	8	100	8	100	1	100	1	100	6	67	6	67	9	89	9	56	11	64	11	18
469 LANSING	86	95	85	96	72	90	72	92	99	91	99	82	107	97	107	81	102	95	102	69
470 ARKANSAS CITY	215	93	214	90	196	82	196	77	206	74	204	62	231	95	233	58	196	85	195	65
471 DEATEH	16	94	16	94	8	100	8	100	12	75	13	77	7	100	7	14	14	86	14	71
473 CHAPMAN	77	96	77	92	88	95	88	97	85	84	85	81	93	89	92	68	82	91	81	78
474 HAVILAND PUBLIC SCHOOLS	13	92	13	85	11	100	11	91	8	100	8	88	10	100	10	100	14	100	14	93
475 JUNCTION CITY	641	86	636	92	470	86	470	84	416	76	415	73	426	88	424	50	340	74	335	59
476 COPELAND	9	89	9	89	12	100	12	100	10	80	10	80	7	100	7	86	11	91	11	45
477 INGALLS	15	100	15	100	15	93	15	93	9	78	9	67	21	86	21	48	16	81	16	69
479 CHEST	20	100	20	100	24	66	24	75	12	67	12	58	18	72	18	56	21	81	21	57
480 LIBERAL	254	89	254	94	223	82	224	77	206	78	208	76	234	92	234	55	202	80	202	57
481 RURAL VISTA	38	87	38	95	44	80	44	77	24	88	24	75	33	100	33	85	19	84	19	84
482 DIGHTON	27	100	27	85	23	91	23	83	21	95	21	62	22	100	22	95	37	92	37	84
483 KISMET-PLAINS	38	97	38	97	35	100	35	100	45	84	45	67	39	100	39	77	41	95	41	90
484 FREDONIA	82	85	82	90	65	75	65	89	60	85	60	75	82	92	82	76	65	78	65	81
486 ELWOOD	25	80	25	96	12	83	12	50	12	75	12	58	17	94	17	59	11	27	11	18
487 MERINGTON	35	94	35	97	49	98	49	92	28	89	28	86	44	98	44	55	33	94	33	67
488 AXTELL	20	95	20	90	20	95	20	65	11	91	11	100	25	100	25	88	30	100	30	100
489 HAYS	250	97	250	98	229	97	230	95	234	90	234	77	233	98	233	82	179	90	179	83
490 EL DORADO	131	97	131	98	136	98	135	89	133	95	133	89	146	94	146	84	116	92	116	87
491 EUDORA	61	98	61	100	52	90	52	98	47	83	47	81	59	98	59	59	44	90	44	84
492 FLINTHILLS	24	100	24	100	19	74	19	74	14	79	14	43	19	100	19	47	23	78	23	52
493 COLUMBUS	110	92	110	97	95	89	96	88	78	90	80	85	102	94	103	82	103	83	103	44
494 SYRACUSE	22	86	22	100	31	84	31	94	27	89	27	85	46	87	46	70	34	88	34	71
495 FT LARNED	96	93	95	97	82	90	80	89	85	88	85	80	82	96	83	86	101	83	101	57

PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

	GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
	READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
496 PAWNEE HEIGHTS	8	100	8	100	13	100	13	92	8	100	8	88	11	91	11	73	13	85	13	85
497 LAWRENCE	527	89	523	94	492	89	495	85	493	83	487	74	527	92	530	80	466	91	466	84
498 VALLEY HEIGHTS	31	97	31	90	25	92	25	88	32	84	32	75	36	97	36	81	34	79	34	68
499 GALENA	64	95	64	97	48	92	48	88	58	76	58	67	54	78	54	46	48	90	47	85
500 KANSAS CITY	1641	72	1641	78	1548	63	1555	60	1569	55	1571	46	1576	82	1576	42	1474	68	1469	37
501 TOPEKA PUBLIC SCHOOLS	973	89	960	95	930	82	929	78	883	79	887	76	1030	95	1029	76	881	87	875	72
502 LEWIS	12	100	12	100	12	100	12	100	14	93	14	71	11	100	11	64	14	100	14	79
503 PARSONS	164	95	164	99	129	85	129	86	139	81	139	76	148	84	148	68	150	81	149	61
504 OSWEGO	33	76	33	82	42	81	42	67	37	70	37	73	34	94	34	59	32	94	32	75
505 CHETOPA	24	88	24	100	18	100	18	94	26	85	26	85	26	88	26	96	28	71	28	89
506 LABETTE COUNTY	102	99	102	100	92	92	92	90	99	85	99	78	124	94	124	86	126	91	126	75
507 SATANTA	36	94	36	97	23	78	23	83	31	77	31	58	25	92	25	40	23	91	23	52
508 BAXTER SPRINGS	65	95	67	97	69	80	69	81	86	79	87	84	86	93	85	59	71	89	71	72
509 SOUTH HAVEN	13	77	13	92	13	85	13	62	12	50	12	42	15	80	15	53	11	91	11	82
511 ATTICA	11	100	11	91	16	94	16	81	15	80	15	67	15	93	17	35	14	100	14	100
512 SHAWNEE MISSION PUBLIC SCHOOLS	1984	97	1972	99	1973	95	1973	93	2026	92	2030	85	2424	98	2416	79	2503	96	2502	82

NON—PUBLIC SCHOOLS
KANSAS MINIMUM COMPETENCY TEST RESULTS

			GRADE 2				GRADE 4				GRADE 6				GRADE 8				GRADE 10			
			READING		MATH		READING		MATH		READING		MATH		READING		MATH		READING		MATH	
			NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD	NO. TSTD	% MTG STD
801	Dodge City Diocesan	801	239	97	238	97	229	90	229	81	174	85	174	70	89	93	89	55	.	.	.	.
815	Midland Adventist	815	12	100	12	92	14	86	14	86	9	67	9	67	6	100	6	67	10	90	10	50
822	Archdiocese of Kansas City	822	1142	95	1137	94	1007	92	1004	87	945	89	948	78	869	97	869	77	772	94	771	78
843	Salina Diocesan Schools	843	263	96	263	93	236	86	236	81	177	84	177	64	123	98	122	59	207	92	206	71
856	Catholic Diocese of Wichita	856	828	97	824	93	705	92	704	83	617	89	617	76	578	98	577	74	445	93	445	71
867	Lutheran Elementary Schools KS	867	199	93	199	92	185	88	185	84	143	85	143	71	142	95	142	68	.	.	.	.
911	Independence Bible College	911	4	100	4	100	7	100	7	100	3	100	3	100	7	100	7	86	7	100	7	43
916	Wichita Christian Challenge	916	48	98	47	96	39	90	38	76	37	81	37	62	28	93	28	43	26	92	26	54
920	Central Christian Schools	920	21	100	21	100	11	100	11	100	9	89	9	78	15	80	15	53	14	86	14	71
927	Kansas Seventh Day Adventists	927	17	71	17	59	14	93	14	100	9	67	9	44	8	88	8	75	20	65	20	40
934	Butcher Children's School	934	18	100	18	89	13	46	13	46	.	.	.	.	.	.	.	.	.	.	.	.
941	Pleasant Green Community	941	30	57	29	76	20	60	20	65	20	40	20	10	3	0	3	0	2	0	2	0
948	Hyman Brand Hebrew Academy	948	23	100	23	96	24	83	24	88	15	93	15	73	12	100	12	83	.	.	.	.
956	Berean Academy	956	.	.	.	.	.	.	.	.	18	89	18	100	33	97	33	58	35	97	35	71
963	Bethel Life School	963	50	84	50	90	19	79	19	74	28	68	28	54	23	96	23	61	13	92	13	69
977	St. John's Military School	977	.	.	.	.	1	100	1	100	10	70	10	70	24	88	24	33	27	78	27	41
980	Shalom Elementary School	980	5	100	5	100	6	33	6	33	3	100	3	67	2	100	2	0	.	.	.	.